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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Akira Nonaka

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EXAMINER

DAVIS, ZACHARY A

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/741,668	Applicant(s) NONAKA ET AL.	
	Examiner Zachary A. Davis	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 15-22 and 57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 15-22 and 57 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 13 June 2006 has been entered.
2. By the above submission, Claims 1, 17, and 57 have been amended. No claims have been added or canceled. Claims 1-11, 15-22, and 57 are currently pending in the present application.

Response to Arguments

3. Applicant's arguments with respect to claims 1-11, 15-22, and 57 have been considered but are moot in view of the new ground(s) of rejection.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Independent Claims 1, 17, and 57 have been amended to include the limitation “wherein the purchase mode is determined from one or more purchase mode options, and each purchase mode option has a different level of restriction imposed on a playback operation”. It appears that there is no antecedent basis for such a limitation in the specification; particularly, it appears that there is no mention in the specification of a “purchase mode option” having a “level of restriction imposed on a playback operation”. See below regarding the rejection under 35 U.S.C. 112, first paragraph, for further detail.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-11, 15-22, and 57 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application

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was filed, had possession of the claimed invention. Specifically, independent Claims 1, 17, and 57 have been amended to include the limitation "wherein the purchase mode is determined from one or more purchase mode options, and each purchase mode option has a different level of restriction imposed on a playback operation". It appears that there is no written description of such a limitation in the present specification. More specifically, it appears that there is no mention whatsoever in the specification of a "purchase mode option" or of a "level of restriction imposed on a playback operation" that such a purchase mode option or options would include. Claims 2-11, 15, 16, and 18-22 are rejected due to their dependence on a rejected base claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-11 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier et al, US Patent 5768382, in view of Christiano, US Patent 5671412, and Stefik et al, US Patent 5629980.

In reference to Claim 1, Schneier discloses an apparatus within a tamper-resistant circuit module (column 8, lines 17-27; column 11, lines 31-37) including a first bus (see Figures 4C-4H), an arithmetic processing circuit (Figure 4C, CPU 302), a

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storage circuit (Figure 4C, ROM 304), a second bus (see Figures 4C-4H), an interface circuit (see Figure 4C), an encryption processing circuit (Figure 4B-4C, encryption/decryption module 28; also column 11, lines 41-46), and an external bus interface circuit (Figure 4C, I/O 312). However, Schneier does not explicitly disclose determining a mode based on a handling policy and creating log data, nor does Schneier disclose creating usage control status data or controlling the use of the content data.

Christiano discloses determining a usage or purchase mode based on a usage license policy (column 6, line 60-column 7, line 30) and logging data (column 18, lines 53-61). Christiano further discloses creating usage control status data (column 10, lines 53-57) that includes a content identification (column 10, lines 27-33), the purchase mode (column 10, line 53-column 11, line 11), identification of a circuit module (column 10, lines 33-36), and a user identification (column 10, lines 53-57; column 6, lines 64-column 7, line 1; column 4, line 61-column 5, line 2). Christiano additionally discloses controlling use of content data (column 10, line 64- column 11, line 3) and a usage monitor that monitors the usage control policy and status data to ensure that content data is properly used based on a license (column 6, line 60-column 7, line 46; column 10, lines 53-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schneier by including the usage policies and licensing as disclosed by Christiano, in order to provide a variety of options and flexibility in controlling usage of licensed data (see Christiano, column 3, lines 12-19).

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Although Schneier and Christiano disclose a purchase mode (see Christiano, column 10, line 53-column 11, line 11), neither Schneier nor Christiano explicitly discloses that the purchase mode is determined from one or more purchase mode options, each having a different level of restriction imposed on a playback operation. Stefik discloses a system for controlling distribution and use of digital works that includes a plurality of purchase modes (see Stefik, column 17, line 63-column 26, line 35; more specifically, see column 17, line 64-column 18, line 6; column 19, lines 20-31, describing limitations on number of copies, fees, and times; column 19, lines 46-57, where rights defining playing and printing of a work are described; column 21, lines 10-24, defining limitations on a number of copies to be made; see also column 43, line 45-column 50, line 14, defining various use scenarios) each having a different level of restriction imposed on a playback operation (see again column 17, line 63-column 26, line 35, for a variety of rights, and column 43, line 45-column 50, line 14, for a variety of use scenarios; see also column 36, lines 30-64, where limitations are checked for a playback operation). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schneier and Christiano by including a plurality of purchase modes each imposing different restrictions on playback, in order to allow the owner of a digital work to attach to the work usage rights defining how the work may be used and/or distributed (see Stefik, column 3, lines 51-61).

In reference to Claim 2, Schneier, Christiano, and Stefik further disclose a second interface circuit and that the first bus includes a third bus and a fourth bus (see Schneier, Figures 4C-4H).

In reference to Claim 3, Schneier, Christiano, and Stefik further disclose a third interface circuit communicating with a recording medium (see Schneier, Figure 4H, interface circuitry 406), a fifth bus, and a fourth interface circuit (see Schneier, Figures 4C-4H).

In reference to Claim 4, Schneier, Christiano, and Stefik further disclose a public key encryption circuit (see Schneier, column 10, lines 27-56) and a common key encryption circuit (see Schneier, column 9, line 62-column 10, line 11).

In reference to Claim 5, Schneier, Christiano, and Stefik further disclose that the storage circuit stores private and public key data (see Schneier, column 11, lines 44-48), the public key encryption circuit verifies the integrity of signature data and creates signature data (see Schneier, column 10, lines 41-56), and the common key encryption circuit encrypts and decrypts content data and key data using a session key (Schneier, column 9, line 65-column 10, line 6).

In reference to Claim 6, Schneier, Christiano, and Stefik further disclose a hash value generating circuit used by the public key encryption circuit in verifying and creating signatures (see Schneier, column 17, lines 46-50).

In reference to Claim 7, Schneier, Christiano, and Stefik further disclose a random number generating circuit (see Schneier, column 10, lines 57-67).

In reference to Claim 8, Schneier, Christiano, and Stefik further disclose an external storage circuit (see Schneier, column 7, lines 57-60).

In reference to Claims 9 and 11, Schneier, Christiano, and Stefik disclose everything as applied to Claim 8 above. Schneier, Christiano, and Stefik further disclose that programs are executed from memory in a conventional manner (see Schneier, column 7, lines 60-61). However, neither Schneier, Christiano, nor Stefik explicitly discloses a storage-circuit control circuit or a storage management circuit. Official notice is taken that it is well known in the computer arts to include a memory controller or memory management circuit, such as a DMA or MMU, in order to allow for the optimization of the use of memory. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schneier, Christiano, and Stefik by including a memory controller or manager, in order to optimize the use of memory, as is well known in the computer arts.

In reference to Claim 10, Schneier, Christiano, and Stefik further disclose that the external bus is connected to a host processor (see Schneier, Figure 4C, where the I/O 312 is connected to external CPU 27).

In reference to Claim 15, Schneier, Christiano, and Stefik further disclose a real time clock (see Schneier, column 11, line 46). Further, Schneier, Christiano, and Stefik disclose encrypting key data and control data (see Christiano, column 14, lines 23-28) and storing license key data (Christiano, column 14, lines 19-21).

In reference to Claim 16, Schneier, Christiano, and Stefik further disclose that the storage circuit writes and erases data in units of blocks and also discloses a write lock

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control circuit for controlling writing and erasing blocks of data (see Schneier, column 18, lines 39-43).

In reference to Claim 17, Schneier discloses an apparatus within a tamper-resistant circuit module (column 8, lines 17-27; column 11, lines 31-37) including a first bus (see Figures 4C-4H), an arithmetic processing circuit (Figure 4C, CPU 302), a storage circuit (Figure 4C, ROM 304), a second bus (see Figures 4C-4H), an interface circuit (see Figure 4C), an encryption processing circuit (Figure 4B-4C, encryption/decryption module 28; also column 11, lines 41-46), and an external bus interface circuit (Figure 4C, I/O 312). Schneier further discloses receiving an interrupt from an external circuit, performing processing, and reporting a result of the processing (column 11, lines 55-67). However, Schneier does not explicitly disclose determining a mode based on a handling policy and creating log data, nor does Schneier disclose creating usage control status data or controlling the use of the content data.

Christiano discloses determining a usage or purchase mode based on a usage license policy (column 6, line 60-column 7, line 30) and logging data (column 18, lines 53-61). Christiano further discloses creating usage control status data (column 10, lines 53-57) that includes a content identification (column 10, lines 27-33), the purchase mode (column 10, line 53-column 11, line 11), identification of a circuit module (column 10, lines 33-36), and a user identification (column 10, lines 53-57; column 6, lines 64-column 7, line 1; column 4, line 61-column 5, line 2). Christiano additionally discloses controlling use of content data (column 10, line 64- column 11, line 3) and a usage

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monitor that monitors the usage control policy and status data to ensure that content data is properly used based on a license (column 6, line 60-column 7, line 46; column 10, lines 53-57). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schneier by including the usage policies and licensing as disclosed by Christiano, in order to provide a variety of options and flexibility in controlling usage of licensed data (see Christiano, column 3, lines 12-19).

Although Schneier and Christiano disclose a purchase mode (see Christiano, column 10, line 53-column 11, line 11), neither Schneier nor Christiano explicitly discloses that the purchase mode is determined from one or more purchase mode options, each having a different level of restriction imposed on a playback operation. Stefik discloses a system for controlling distribution and use of digital works that includes a plurality of purchase modes (see Stefik, column 17, line 63-column 26, line 35; more specifically, see column 17, line 64-column 18, line 6; column 19, lines 20-31, describing limitations on number of copies, fees, and times; column 19, lines 46-57, where rights defining playing and printing of a work are described; column 21, lines 10-24, defining limitations on a number of copies to be made; see also column 43, line 45-column 50, line 14, defining various use scenarios) each having a different level of restriction imposed on a playback operation (see again column 17, line 63-column 26, line 35, for a variety of rights, and column 43, line 45-column 50, line 14, for a variety of use scenarios; see also column 36, lines 30-64, where limitations are checked for a playback operation). Therefore, it would have been obvious to one of ordinary skill in

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the art at the time the invention was made to modify the apparatus of Schneier and Christiano by including a plurality of purchase modes each imposing different restrictions on playback, in order to allow the owner of a digital work to attach to the work usage rights defining how the work may be used and/or distributed (see Stefik, column 3, lines 51-61).

9. Claims 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneier in view of Christiano and Stefik as applied to claim 17 above, and further in view of Castor et al, US Patent 5590288.

In reference to Claims 18 and 19, Schneier, Christiano, and Stefik disclose everything as applied to Claim 17 above. However, Schneier as modified above does not explicitly disclose reporting the result of processing by outputting an interrupt. Further, Schneier as modified above does not explicitly disclose that the external bus interface includes a common memory and that the external circuit obtains a result by polling.

Castor discloses a system which allows a computer to request another computer to execute a procedure (column 3, lines 38-42) including outputting an interrupt (column 12, lines 29-33). Castor further discloses a common memory (the buffer of column 12, lines 33-35) and polling an interface circuit to obtain a result (column 12, lines 35-47). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Schneier as modified above by including the interrupt, buffer, and polling of Castor, in order to increase reliability, lower cost, and

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allow easier upgrades in a distributed computing system (Castor, column 4, lines 11-21).

In reference to Claim 20, Schneier as modified above further discloses first status registers including flags (see Castor, column 12, lines 29-35).

In reference to Claim 21, Schneier as modified above further discloses storing and executing an interrupt program (see Castor, column 5, lines 49-51).

In reference to Claim 22, Schneier as modified above further discloses storing and executing a plurality of interrupt programs and subroutines (see Castor, column 5, lines 49-55).

10. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Christiano in view of Stefik.

Christiano discloses a method including determining a usage or purchase mode based on a usage license policy (column 6, line 60-column 7, line 30); creating log data (column 18, lines 53-61); creating usage control status data (column 10, lines 53-57) that includes a content identification (column 10, lines 27-33), the purchase mode (column 10, line 53-column 11, line 11), identification of a circuit module (column 10, lines 33-36), and a user identification (column 10, lines 53-57; column 6, lines 64-column 7, line 1; column 4, line 61-column 5, line 2); monitoring usage control policy and status data to ensure that content data is properly used based on a license (column 6, line 60-column 7, line 46; column 10, lines 53-57); controlling use of content data (column 10, line 64-column 11, line 3); recording the content data (column 10, lines 62-

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64, where the product is used on a computer system, and therefore stored at least temporarily therein; see also column 6, lines 28-31, where various storage media are disclosed); and encrypting key data and control data (column 14, lines 23-28).

However, although Christiano discloses a purchase mode (see Christiano, column 10, line 53-column 11, line 11), Christiano does not explicitly disclose that the purchase mode is determined from one or more purchase mode options, each having a different level of restriction imposed on a playback operation.

Stefik discloses a method for controlling distribution and use of digital works that includes a plurality of purchase modes (see Stefik, column 17, line 63-column 26, line 35; more specifically, see column 17, line 64-column 18, line 6; column 19, lines 20-31, describing limitations on number of copies, fees, and times; column 19, lines 46-57, where rights defining playing and printing of a work are described; column 21, lines 10-24, defining limitations on a number of copies to be made; see also column 43, line 45-column 50, line 14, defining various use scenarios) each having a different level of restriction imposed on a playback operation (see again column 17, line 63-column 26, line 35, for a variety of rights, and column 43, line 45-column 50, line 14, for a variety of use scenarios; see also column 36, lines 30-64, where limitations are checked for a playback operation). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Christiano by including a plurality of purchase modes each imposing different restrictions on playback, in order to allow the owner of a digital work to attach to the work usage rights defining how the work may be used and/or distributed (see Stefik, column 3, lines 51-61).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Reay et al, US Patent 6882979, discloses a system for distribution of digital products that includes preview modes which can limit number, times, or quality of uses, and that further includes licenses (i.e. purchase modes) that can more generally limit number of times of use or place a time limit on use.
- b. Venkatesan et al, US Patent 6898706, discloses a license based digital rights management system in which purchase modes can place various limitations on the use or playing of a digital work, for example by time limits or number of uses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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